

WHAT IS CLAIMED IS:

1. A dielectric ceramic composition comprising a first component and a second component,

5            wherein a content of the second component is in a range of 25 to 80 wt%,

            the first component is a complex oxide represented by Formula:

$x\text{ZrO}_2 - y\text{TiO}_2 - z\text{L}_{(1+u)/3}\text{M}_{(2-u)/3}\text{O}_2$ , and

10            the second component is a glass composition containing an oxide of at least one element selected from the group consisting of Si, B, Al, Ba, Ca, Sr, Zn, Ti, La, and Nd,

            wherein L is at least one element selected from the group consisting of Mg, Zn, Co, and Mn, M is at least one element selected from the group consisting of Nb and Ta, and x, y, z, and u are values represented by

15             $x + y + z = 1$ ,

$0.10 \leq x \leq 0.60$ ,

$0.20 \leq y \leq 0.60$ ,

$0.01 \leq z \leq 0.70$ , and

$0 \leq u \leq 1.90$ .

20            2. A dielectric ceramic composition according to claim 1, wherein the second component is a glass composition containing 30 to 60 wt% of  $\text{SiO}_2$ , 2 to 30 wt% of  $\text{B}_2\text{O}_3$ , 2 to 10 wt% of  $\text{Al}_2\text{O}_3$ , and 20 to 50 wt% of QO,

            wherein Q is at least one element selected from the group consisting of Ba and Ca.

25            3. A dielectric ceramic composition according to claim 1, wherein the second component is a glass composition containing 30 to 60 wt% of  $\text{SiO}_2$ , 2 to 10 wt% of  $\text{B}_2\text{O}_3$ , 2 to 10 wt% of  $\text{Al}_2\text{O}_3$ , 20 to 50 wt% of QO, and 5 to 15 wt% of  $\text{La}_2\text{O}_3$ ,

30            wherein Q is at least one element selected from the group consisting of Ba and Ca.

4. A dielectric ceramic composition according to claim 1, wherein the second component is a glass composition containing 40 to 60 wt% of  $\text{SiO}_2$ , 2 to 10 wt% of  $\text{B}_2\text{O}_3$ , 2 to 10 wt% of  $\text{Al}_2\text{O}_3$ , 20 to 50 wt% of QO, and 1 to 5 wt% of ZnO,

35            wherein Q is at least one element selected from the group consisting of Ba and Ca.

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5. A dielectric ceramic composition according to claim 1, wherein the second component is a glass composition containing 15 to 30 wt% of  $\text{SiO}_2$ , 5 to 20 wt% of  $\text{BaO}$ , 5 to 15 wt% of  $\text{RO}$ , 10 to 25 wt% of  $\text{ZnO}$ , 10 to 30 wt% of  $\text{TiO}_2$ , and 10 to 30 wt% of  $\text{T}_2\text{O}_3$ ,
- 5            wherein R is at least one element selected from the group consisting of Ca and Sr, and T is at least one element selected from the group consisting of La and Nd.
6. A dielectric ceramic composition according to claim 1, wherein the first
- 10           component comprises, as a main phase, a  $\text{ZrTiO}_4$  phase in which at least one element selected from the group consisting of Mg, Zn, Co, and Mn and at least one element selected from the group consisting of Nb and Ta are substituted in a solid phase.
- 15           7. A dielectric ceramic composition according to claim 6, wherein  $0.5 \leq a/b \leq 1.9$  is satisfied in the first component,
- wherein  $a$  is a total of mole fractions of at least one element selected from the group consisting of Mg, Zn, Co, and Mn substituted in a solid phase of  $\text{ZrTiO}_4$ , and  $b$  is a total of mole fractions of at least one element selected
- 20           from the group consisting of Nb and Ta substituted in a solid phase of  $\text{ZrTiO}_4$ .
8. A dielectric device comprising a dielectric ceramic and a conductor formed so as to be in contact with the dielectric ceramic,
- wherein the dielectric ceramic comprises a dielectric ceramic
- 25           composition of claim 1, and
- the conductor contains, as a main component, at least one element selected from the group consisting of Ag and Pd.